**AN ASSESSMENT OF THE AIR FORCE WEATHER AGENCY'S READINESS
FOR KNOWLEDGE MANAGEMENT INITIATIVES**

THESIS

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AFIT/GIR/ENV/09-M04

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THESIS

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Abstract

The successful implementation of knowledge management (KM) initiatives requires a level of commitment and preparedness by the organization that is commensurate with the expected results. An organization must be willing to allocate the necessary resources to ensure their readiness to undertake new KM projects. The purpose of this study is to review AFWA's organizational culture and measure its propensity for accepting KM initiatives. The study uses empirically validated constructs to evaluate and assess the organization's people, culture, climate, processes and attitudes as they relate to KM. This research was conducted using semi-structured interviews to elicit respondents' views about KM practices. The data points toward a strong corollary relationship between the organizational environment and its readiness to embrace KM principles.

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I. Introduction

Background

The evolution of knowledge from existential being to practical application has

changed its utility from personal epistemology into a versatile public commodity (to

show contrast or growth) (Drucker, 1993). In the early 1900s many organizations began

to recognize the tangible and intrinsic qualities of not only possessing but also leveraging

knowledge. Thus, was born the 'Management Revolution' in which knowledge became a

primary factor in the production of goods and services (Drucker, 1993). This

transformation and adaptation of management practices also increased our ability to

quickly diffuse and share what we know with others inside and outside of the

organization. Moreover, it enhanced the accessibility--and reduced viscousness--of

proprietary knowledge among segmented areas within the organization.

A philosophical change in post-capitalist management practices revolutionized the

importance of knowledge in business operations concerning worker-and-machine

relationships. As ordinary workers became more knowledgeable of work processes

managers began emphasizing the use of equipment as a supportive tool in aiding

employees rather than employees primarily assisting machinery in the production of

goods (Drucker, 1993). This new rationale gave birth to the 'knowledge worker' as the

owner to "…the means of production" (Drucker, 1993, p. 64). It also epitomized the

workers' ability to vertically compress decision-making which increased operational

efficiency, customer service and worker empowerment (Hammer & Champy, 2003).

Consequently, as organizations realized the value in dispersing knowledge across functional departments they began to leverage its implicit and explicit qualities and competitive advantages that it provided.

However, recognizing the benefits of knowledge alone is simply not enough toward ensuring successful business operations (Davenport & Prusak, 1998). Davenport and Prusak (1998) implore 'baking' knowledge principles into key processes that integrate work activities with organizational employees. This is not always easily done or well understood, however, its payoff can produce highly coveted rewards for the organization. Embedding what we know into what we do strengthens employees' loyalty and commitment to the perfection of work processes (Davenport & Prusak, 1998; Drucker, 1993). It also increases organizational members' ability to visualize the entirety of processes which they are involved in (Hammer & Champy, 2003). Their comprehension of sound knowledge-application principles is instrumental in knowledge management (KM).

Knowledge workers are an essential part of the organization's culture and contribute greatly to the competitive nature of its business strategy (Davenport & Prusak, 1998; Drucker, 1993). They are also responsible for, "…the creation, sharing, and use of knowledge" within the organization (Davenport & Prusak, 1998, p. xii). Davenport and Prusak (1998, pp. vii, viii), suggest any organization contemplating changing its culture to become more knowledge-oriented is advised to try implementing some of the following practices:

- Incentive structures that reward people in part on the basis of their knowledge contributions

- Senior executives that set an example of knowledge behaviors (by, among other things, reading books and talking about them!)

- Evaluating decisions and decision-making on the basis of the knowledge used to arrive at them

- Celebrating and rewarding people for sharing knowledge and using "stolen" or borrowed knowledge (with proper attribution, of course)

- Hiring new workers partly on the basis of their potential for knowledge behaviors

- Giving workers and managers some "slack" for knowledge creation, sharing, use, and general reflection

- Educating all employees on the attributes of knowledge-based business and knowledge management

These practices epitomize the management of knowledge and represent a fundamental aspect of this research study.

KM Focus

KM Significance

KM initiatives succeed only 15% of the time with Fortune 500 companies losing over $31 billion in 2003 alone due to failed KM ventures (Hylton, 2002). With increasingly shrinking operating budgets and limited resources, organizational leaders must carefully consider the long-term effects of any drastic changes being implemented. This includes assessing and identifying preconditions that must be in place in order for

KM initiatives to grow (Gold, Malhotra, & Segars, 2001). These preliminary steps are

critical to ensuring that KM initiatives are primed to assist organizations in reaching their

strategic objectives.

Holsapple and Joshi (2000) suggest three different factors that affect KM:

environmental influences, managerial influences, and resource influences. These factors

play a major role in determining how much effort is needed toward implementing an

effective KM strategy. Organizations that understand these precursors to KM are more

inclined to realize their potential for success. Otherwise, they account for the other 85%

of organizations who fail miserably to benefit from KM.

Environmental influences are things outside the organization, of which

management has little or no control over, that influence KM (Holsapple & Joshi, 2000).

Holsapple and Joshi (2000, p. 242) further propose that the environment represents the

"governmental, economic, political, social, and educational", factors that can constrain

KM efforts. External factors can affect an organization's ability to leverage KM in order

to remain competitive with others (Holsapple & Joshi, 2000; Davenport & Prusak, 1998).

"They [organizations], therefore need to continuously acquire new knowledge from

external sources to enable them to innovate effectively" (Quintas, Lefrere, & Jones, 1997,

p. 386). These organizations should carefully consider all environmenal factors that will

affect its KM strategy and agenda to ensure success.

Managerial influences pertain to the individuals who are responsible for the

overall administration of KM processes and procedures (Holsapple & Joshi, 2000). These

individuals are responsible for the coordination, control, measurement and leadership of

KM practices (Holsapple & Joshi, 2000). They possess the technological know-how and intuitive skills necessary for facilitating the growth and diffusion of KM throughout the organization (Davenport & Prusak, 1998). Without them the chances for KM succeeding within the organization will be very limited at best.

Holsapple and Joshi (2000) define resource influences to include the financial, human, and knowledge factors that influence KM. An organization's ability to acquire and put to use these factors can severly limit or expand its KM initiatives. Having the proper tools and skill-sets needed to foster KM acceptance is largely determined by the organization's commitment to procuring them (Davenport & Prusak, Working Knowledge: How Organizations Manage What They Know, 1998). If starved of the right personnel and technologies to implement KM correctly, KM can prove inefficient and virtually ineffective in helping organizations reach their goals.

KM Relevance

Readiness is a key factor in helping to determine the viability or finiteness of organizational undertakings before putting corporate assets at risk of huge losses (Holt et al. 2007). An assessment of KM readiness should be a basic precursor before beginning any new KM initiatives as it attempts to uncover problem areas that may derail organizational goals and objectives. Many institutions invest lots of resources toward gauging how prepared they are for embracing upcoming changes. One such example of this is the United States Air Force (USAF).

The USAF performs operational readiness inspections (ORIs) and readiness exercises on a continuous basis throughout its various units. "ORIs are conducted to

evaluate the ability of units with a wartime or contingency mission to perform assigned operational missions" (USAF PDG, 2007, p. 129). Similar to a KM readiness assessment, ORIs are designed to measure an organization's propensity to meet or exceed future expectations. Failure to obtain an accurate assessment of an organization's current readiness profile could easily jeopardize mission objectives. However, ensuring that employees are ready for change and that the work environment is conducive to change initiatives can lead to organizational development programs which can be successfully implemented (Hapachern, Morgan, & Griego, 1998).

This research puts emphasis on the applicability of readiness as it relates to KM initiatives, knowledge audits, and other KM programs that an organization may be considering. KM readiness is a relevant factor in the success or failure of KM initiatives and is a key indicator of what obtcales may lay ahead for the organization. KM readiness has far reaching implications which affect every aspect of the organzation, both internally and externally. The evolution from a dysfuntional knowledge environment (one not KM ready) to one that practices KM daily (KM ready) is dependent upon how receptive organizational members are towards forthcoming KM activities (Holt et al. 2007).

Research Questions

"[KM] has only recently emerged as an explicit area of pursuit for managing organizations—and even more recently as a topic of serious study or academic knowledge transfer" (Wiig, 1997, p. 5). As researchers have gained a better foothold in understanding the practicality of KM, organizations are now viewed as "knowledge engines" which provide valued-added products to their customers (Siemieniuch &

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Sinclair, 2004). The expansion of research and interest in the ontology of KM has generated new ideas and theories concerning its development and implementation. This research attempts to address some organizational characteristics that impinge upon KM. Specifically, we hope to answer the following questions with some degree of confidence:

1. *Is AFWA ready for KM?*

2. *What other factors may contribute to an oranization's KM readiness?*

These questions relate to core aspects of this research study and will help guide us in our search for their answers. Moreover, they are equally important in helping us explore the utility and versatility of our KM readiness instrument. In order to achieve this objective we will focus on maximizing two elements from McGrath's (1981) three-horned dilemma concerning research study. Firstly, we hope to maintain some level of realism in order to accurately reflect the behaviors of each respondent. Secondly, we want to realistically assess respondents in their natural environment to minimize distractions and a potential to contaminate data.

Thesis Overview

The following chapters begin by first discussing the literary and theorectical paradigms that have influenced the development of KM and Holt et al's (2007) KM readiness contruct. We then outline the case study methodology used while conducting our research. After careful analysis of our data we provide the results and findings related to our proposistions and research questions. Finally, we conclude by discussing some of the implications, limitations, and future research possibilities drawn that were from this study.

II. Literature Review

Introduction

        An organization's propensity to capture, codify and distribute knowledge is pivotal to successfully leveraging the value of KM within the corporation's overall business strategy. Notwithstanding most organizations' inability to develop their own organizational knowledge, KM is becoming more widely accepted in many business practices (Zack, 1999). This trend indicates a growing need for both process and technologically centered changes that are oriented at finding and harvesting riches buried within the organization. However, the key to this effort is ensuring that the entire organization is ready to foster KM reform (Davenport & Prusak, 1998).

        An organization's readiness for accepting change can be attributed to certain work factors, such as organizational culture and climate (Hanpachern, Morgan, & Griego, 1998).

These factors can affect the creation, transfer and sharing of knowledge within the organization (Davenport & Prusak, 1998; Nonaka, 1994). They also indicate the organization's willingness to adopt KM initiatives or change in general. Therefore, it is imperative that major changes which will alter the organization's normal processes and procedures be carefully scrutinized to ensure that its infrastructure and people are ready and willing to support it.

KM Ontology

Data

Davenport and Prusak (1998, p. 10) contend that, "data is a set of discrete, objective facts about events…most usefully described as structured records of transactions". Their views are based upon the hierarchical belief that data underpins information and knowledge. However, Ilkka Tuomi believes that data are atomically unstructured; without context; and does not possess any real meaning (Tuomi, 2000). Although there are theoretical differences that exist within the KM discipline most literary researchers regard data as a fundamental component of the knowledge creation process. The pervasiveness of data is readily apparent in every aspect of the organization and its surrounding environment. According to Brent Ruben (1995) it can be gathered from both inside and outside of the organization.

Information

Information, as described by Davenport and Prusak (1998), is structured data that has meaning and communicates a particular message to someone or something. Davenport and Prusak (1998) further stress that, unlike data, information portends a certain level of understanding between the sender and receiver which impacts the receiver's judgment and behavior. Information actually builds upon the data subset and assimilates the various pieces into some level of meaningful interpretation that the receiver may interpolate later. The process of converting data into information is emphasized by Davenport and Prusak (1998, p. 4) through five important methods:

- Contextualized: we know for what purpose the data was gathered

- Categorized: we know the units of analysis or key components of the data

- Calculated: the data may have been analyzed mathematically or statistically

- Corrected: errors have been removed from the data

- Condensed: the data may have been summarized in a more concise form.

This definitive view of information is largely consistent with other leading researchers within the KM discipline. They share a common belief that information is a critical step within the knowledge creating process.

Knowledge

Traditional epistemology holds that knowledge is a: "justified true belief" (Nonaka, 1994, p. 15), which is broader and richer than data or information (Davenport & Prusak, 1998). Knowledge is personal, multidimensional, and exists within the cognitive element of an individual's own experiences and beliefs (Davenport & Prusak, 1998; Nonaka, 1994; Alvi & Leidner, 2001). And since, "Knowledge is what a Knower knows" (Fahey & Prusak, 1998, p. 265) the knower is key to unfurling the power and value that knowledge contains. Alternatively, knowledge can be limited to one's own consciousness of its existence and, therefore, not be shared at all. There are two ways in which knowledge can be shared, only either tacitely or explicitly (Polyanyi, 1962; Polanyi, 1966; Nonaka, 1994).

Tacit knowledge, as first described by Polanyi (1962, p. 601), pertains to, "knowing a thing by relying on our awareness of it for the purpose of attending to an entity to which it contributes". Nonaka (1994, p. 94) further expands upon this ideology

by decomposing tacit knowledge into "both cognitive and technical elements". The cognitive abilities involve human perspectives which helps one perceive things in the world while technical elements are composed of specific contextual characteristics which apply to a particular entity (Nonaka, 1994). Both elements are particularly important aspects for creating knowledge within the organization (Nonaka, 1994). Tacit knowledge is also viewed as being subconsciously understood; difficult to explain; and personally developed through one's own experiences (Zack, 1999).

Unlike tacit knowledge, explicit knowledge is more tangible and easily describable by the one who possesses it (Nonaka, 1994). Polanyi (1966, p. 601) differentiates between the two by defining explicit knowledge as, "knowing a thing by attending to it". Zack (1999, p. 46) believes that explicit knowledge can be, "more precisely and formally articulated", only, allowing for codification. As noted by Nonaka (1994), explicit knowledge can be stored in libraries and various databases to be assessed in a sequential nature. However, in order to maximize the use of explicit knowledge it must be codified in such a way that allows the user to exploit its intrinsic value. Davenport and Prusak (1998, p. 69) offer four underlying principles for increasing an organization's chances to successfully codify their knowledge:

- Decide what goals the codified knowledge will serve

- Identify knowledge existing in various forms appropriate to reaching those goals

- Evaluate knowledge for usefulness and appropriateness for codification

- Identify an appropriate medium for codification and distribution.

KM

KM is a practical discipline that involves helping an organization determine what it knows through harnessing existing knowledge from within (Davenport & Prusak, 1998). This is usually done through a process that consists of creating, storing/retrieving, transferring and applying knowledge (Alvi & Leidner, 2001). However, if not done properly the entire KM process may just be a waste of time and resources. Therefore, it is imperative that KM procedures are developed and aligned to assist in meeting the organization's goals and strategies. This requires assurance that knowledge is, "delivered at the right time; is available at the right place; present in the right shape; [satisfies] the quality requirements; [and is] obtained at the lowest possible costs" (Wiig, Hoog, & Spek, 1997, p. 22). In order to meet this requirement an organization must ensure that it is technologically capable of fulfilling the demand.

According to Davenport and Prusak (1998) KM is a conceptually broad idea that uses technology to capture and manipulate knowledge. Some technological advances they highlight for doing this are: expert systems, artificial intelligence, and knowledge repositories. These systems can easily parse data and provide easier access to hidden bits of knowledge. Davenport and Prusak (1998) also note some advantages that can be gained from using the internet when searching for data. However, too much technology without human interaction can also prove to be detrimental for an organization (Fahey & Prusak, 1998). According to Nonaka and Takeuchi (1995, p. 15), "…the organization cannot create knowledge on its own without the initiative of the individual and the

interaction that takes place within the group". Organizations should seek to maintain a balance between technological and human capabilities.

KM Initiatives

Because the phrase KM initiative and KM project are viewed as one in the same they are therefore used interchangeably within the context of this paper. KM initiatives are typically organizational endeavors that seek to leverage the value of knowledge as an intangible asset (Liebowitz & Megbolugbe, 1998). "Such projects are attempts to do something useful with knowledge, to accomplish organizational objectives through the structuring of people, technology, and knowledge content" (Davenport, Long, & Beers, 1998, p. 47). KM initiatives can be critical to the success or failure of an organization toward meeting established goals and missions. Many organizational executives now recognize knowledge as a critical resource, causing them to invest large amounts of capital in KM initiatives (Kankanhalli et al. 2003). The majority of this capital is used to improve technological capabilities such as hardware and software while simultaneously fostering an environment in which the transfer of knowledge can more easily occur.

As noted earlier technological necessities often play an instrumental role in the development of a KM program and, therefore, must be included in any initiatives that the organization undertakes. Marwick (2001) noted that the appropriate technology must be deployed to achieve an effective KM program. Nonaka and Takeuchi (1995, p. 178) further suggest that the technology sought during KM initiatives should foster the transformation of knowledge that can be processed in four different ways:

- Socialization (tacit to tacit)

- Externalization (tacit to explicit)

- Combination (explicit to explicit)

- Internalization (explicit to tacit).

Another technological aspect that should be addressed when implementing KM initiatives is remembering the importance of those involved in process. Davenport and Prusak (1998) emphasize the need for understanding the various roles that people play within the organization when considering technological improvements for KM initiatives. They also caution that a specific level of knowledge is needed just to utilize any newly acquired technology. Thus, this gives rise to the need for careful evaluation of technological requirements before they are implemented in the organization.

Senior leadership is a key element for KM initiatives that hope to create an environment which encourages the creation and transfer of knowledge (Liebowitz, 1999). Top-level leaders provide corporate backing that nurture the growth and sharing of knowledge with others in the organization. They help create an organizational climate and culture which allow easy extraction and diffusion of knowledge throughout the organization. This philosophical approach discourages KM initiatives which only focus on the gathering and storing knowledge. Davenport and Prusak (1998) argue that, "Too many knowledge projects focus only on stocking the shelves with knowledge…" (p. xiii), thereby, diminishing its overall value. KM initiatives should entail a holistic view of how best to capture, codify, and distribute knowledge within an environment that stimulates its expansion.

The Need for a KM Readiness Instrument

KM initiatives require significant changes within the organization and are usually complex in nature (Davenport & Prusak, 1998). These changes are influenced by how ready organizational members and its infrastructure are toward adopting KM practices. Holt et al. (2007, p. 77) posit that, "…KM readiness is an important aspect of the process to facilitate and diffuse KM". Holt et al. (2007) also believe that a measurement which gauges an organization's readiness to implement KM initiatives could prove essential to organizational leaders by identifying gaps which exist between leaders' beliefs and the beliefs of organizational members. These same leaders could then address whatever disparities which may exist before undertaking projects that the organization is clearly not able or ready to handle. This could foster a healthy organizational culture and climate for accepting and implementing KM initiatives.

A KM readiness instrument would also aid in assessing whether or not essential personnel have been identified within the organiation before wasting precious time and resources on KM initiatives needlessly. (Holt et al. 2007) Since Chief Knowledge Officers (CKOs) are pivotal in leading the KM charge they are important in the development of a KM readiness instrument (Davenport & Prusak, 1998; Holt et al. 2007). Davenport and Prusak (1998) define CKOs as advocates who evangelize the diffusion and sharing of knowledge within the organization. They act as enablers who, "set the stage and provide insights into the factors that should be considered [for developing] a measure for KM readiness" (Holt et al. 2007 p. 76). Therefore, ensuring that key-player

roles have been thorougly considered and understood is critical to establishing a good readiness instrument.

KM Readiness Measures

Using Holt et al's (2007) development of a readiness instrument, this paper explores the major facets identified by KM researchers as relevant to KM readiness. These facets have been categorized into five areas for measurement: individual measures, context measures, content measures, process measures, and KM attitudes.

<div align="center">

Individual Measures

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Individual measures are associated with 'who' is involved with KM initiatives and, thus, important in the development of a KM readiness instrument (Holt et al. 2007). The individual measurements are comprised of three facets (affect, efficacy, and innovativeness) which are used to assess the individuals being evaluated (Holt et al. 2007). These measurements are indicators of human dimensions that influence how well people respond to changes brought about due to KM initiatives. They can also pinpoint areas for improving an individual's acceptance of KM initiatives and goals.

Affect involves the participant's disposition toward feeling positive or negative about a particular situation (Holt et al. 2007). Positive affect is a reflection of how enthusiastic, active and alert someone might be; thus, anyone having high positive affect could be described as having, "a state of high energy, full concentration, and pleasurable engagement" (Watson, Clark, & Tellegen, 1988, p. 1063). Conversely, Watson, Clark & Tellegen (1988, p. 1063) characterizes negative affect by "sadness and lethargy", which implies, "…a general dimension of subjective distress and unpleasurable engagement…"

(p. 1063) that the individual possesses. Both positive and negative affect can strongly influence the mood and overall disposition of individuals toward changes related to KM initiatives (Holt et al. 2007; Watson, Clark & Tellegen, 1988).

Efficacy (self) involves an individual's own assessment of how well they can fulfill the roles and behaviors needed to implement KM initiatives (Holt et al. 2007). Bandura (1989, p. 1175) states that, "Self-efficacy beliefs function as an important set of proximal determinants of human motivation, affect and action". An individual's belief system can play an important part in determining whether KM initiatives are a success or failure. Edwin Locke et al. (1984) found that the strength of self-efficacy directly affects task performance and goal achievement.

Innovativeness can be described administratively or technically as related to organizational performance (Subramanian & Nilakanta, 1996). Subramanian and Nilakanta (1996) discovered that administrative innovativeness can significantly improve organizational efficiency while technical innovativeness is directly associated with an organization's efficiency and effectiveness. These assertions imply that innovativeness can increase an organization's performance and ability to implement change initiatives. Nonaka and Takeuchi (1995) also believe that innovativeness can lead to a competitive advantage for organizations that readily embrace change. The infrastructural processes and procedures are more easily adaptable and responsive to changes that arise from newly adopted KM initiatives.

Context Measures

Context measures relate to 'where' KM initiatives are occurring in an organization and attest to the organization's support for change (Holt et al. 2007). They are indicative of how prepared the organizational environment is for accepting and embracing change (Davenport & Prusak, 1998). Therefore, we will discuss two important variables that significantly contribute to the contextual measurement within our readiness instrument—organizational support and the communication climate.

Organizational support is a top high priority for the success of KM initiatives and should be carefully evaluated before implementing any changes. Every organizational member should play an instrumental role in fostering KM reform initiatives if success is to be expected (Davenport & Prusak, 1998). This means ensuring that specialties and attitudes are conducive toward nurturing KM in all activities (Davenport & Prusak, 1998). Nonaka and Takeuchi (1995, p. 127) propose a Middle-up-down managerial approach that, "best communicates the continuous iterative process by which knowledge is created". This managerial style facilitates the diffusion and transfer of knowledge within the organization because middle managers serve as 'knowledge engineers' who bridge upper and lower level ideals (Nonaka & Takeuchi, 1995).

Organizational support is also imbued by how committed and dedicated top leaders are in building a KM ready workplace. Organizational leaders create a knowledge culture that fosters employee involvement through education, incentives and setting examples (Davenport & Prusak, 1998). This increases an individual's perception of their employee-organization relationship and is a major factor in creating a sense of unity and

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shared values (Eisenberger, Fasolo, & Davis-LaMastro, 1990). Organizational support

can also motivate employees in their job performance and commitment to help the

organization succeed (Eisenberger, Fasolo, & Davis-LaMastro, 1990). They do so by

creating a 'knowledge-friendly' culture that takes a positive view toward cultivating and

transferring knowledge (Davenport, Long, & Beers, 1998).

The communication climate is an important factor in the facilitation of KM

initiatives and the spreading of knowledge within an organization. In order to achieve

fertile development of knowledge an organization must ensure that, "Clarity of purpose

and terminology…", is first established (Davenport & Prusak, 1998, p. 158). Clear

communication of KM benefits from top executives to employees is a significant factor

in minimizing confusion and negativity (Desouza, 2003). An organization that creates

opportunities for employees to mingle and share information is ripe for embracing KM

changes. Encouraging employees to socialize and exchange what they know fosters

feelings of trust and gratitude (Bock & Kim, 2002). This can be done through the

implementation of knowledge markets, knowledge maps, and communities of practice

within the organization (Davenport & Prusak, 1998). However, it is just as important to

note the things that can hinder an effective communication environment.

Fahey and Prusak (1998) warn against substituting technology for human

interface because, "Knowledge is primarily a function and consequence of the meeting

and interaction of minds, [and that] human intervention remains the only source of

knowledge generation" (p. 273). Their assessment stresses the importance of getting

people together and allowing them to build and facilitate a KM rich climate. Another

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critical point for managers to remember is to avoid hiring smart people and isolating them or overburdening them with tasks that limit their conversation and thought (Davenport & Prusak, 1998). This type of behavior restricts the organization's ability to extract and distribute critical bits of knowledge which can help achieve organizational goals. It also underestimates the value of the employees' need to network while resolving organizational problems (Davenport & Prusak, 1998).

Content Measures

Content measures typically involve 'what' is taking place within an organization and the effect that it has upon organizational members' readiness for KM initiatives (Holt et al. 2007). These measures observe pertinent factors within the organization and provide some indication about how much hinderance or support can be expected based upon the members' views of the upcoming change. The three measurements essential to our readiness instrument are: appropriateness, personal valence and KM evaluation (Holt et al. 2007).

Appropriateness is a matter of determining the need for change and choosing the right types of projects that will align KM initiatives with an organization's business strategy. KM initiatives should focus on doing the right thing while selecting the right anchor that is relevant to the organization's infrastructure (Paramasivan, 2003; Davenport & Prusak, 1998). Change just for change sake can spell disaster for leaders who fail to comprehend the impending repercussions that may result from bad decisions. It is equally imperative that organizational leaders understand, "…the importance of the specific

knowledge domain and the feasibility of [a] project" (Davenport & Prusak, 1998, p. 164),

before it begins any KM initiative.

Organizational leaders should also have a knowledge vision that defines the field

and domain in which organizational members will live in (Nonaka & Takeuchi, 1995).

Nonaka and Takeuchi (1995) strongly believe that this helps in providing direction to

organizational members about what knowledge should be sought and created.

Subsequently, KM initiatives should ensure that knowledge is going to be (Wiig, Hoog,

& Spek, 1997, p. 16):

- Delivered at the right time

- Available at the right place

- Present in the right shape

- Satisfying the quality requirements

- Obtained at the lowest possible costs.

 Inappropriate KM measures could easily comprise overall KM efforts and waste

valuable time and resources.

Personal valence involves how organizational members feel about the effects and

impacts that KM initiatives will have upon them personally. If organizational members

believe, "there's nothing in it for me" (Grimaud, 1994, p. 37), than they are much more

likely to resist whatever changes are being made. If changes are not effectively

communicated to organizational employees they could be viewed as personally harmful

(Matejka & Julian, 1993). Therefore, it is very important that leaders communicate the

holistic relevance of KM initiatives to all individuals. Leaders should also be aware of

employees' personal attributes and confidence levels when it comes to handling KM reforms. Not having the right skill sets needed to accomplish KM objectives could only exacerbate employees' propensity to resist KM initiatives (Matejka & Julian, 1993). This may require spending corporate dollars to help ensure all individuals are properly trained, thus, increasing the likelihood of a successful KM initiative (Davenport, Long, & Beers, 1998).

KM evaluation centers on whether organizational members view KM initiatives positively or negatively. Their opinions are highly influenced by whether change is seen as a necessity or as an organizational burden. Hammer and Champy (2003) suggest organizational leaders deliver a clear message which advocates the need for change and details what the organization must become. Leaders should also provide incentives that motivate employees to become more readily accepting of KM initiatives. Thomas Stewart (1994, p. 109) believes that "Change is easier if managers and employees are rewarded…" for their efforts. This can also help in reducing or even eliminating some organizational members' reluctance to share knowledge (Davenport & Prusak, 1998). A leader's ability to effectively persuade organizational members to see change as a good thing is imperative to the organization's KM readiness (Davenport & Prusak, 1998).

Process Measures

Process measures are associated with 'how' KM is occurring and the important factors needed for accomplishing KM goals (Holt et al. 2007). These measurements are essential to the development and expansion of any KM initiative and are fundamental to

KM's overall success. They must be carefully considered and longitudinally applied during the KM life cycle.

Senior management support has been identified as one factor that can help lead to a successful KM project (Davenport, Long, & Beers, 1998). Organizational leaders that value KM and align KM objectives with the organization's business strategy are much more likely to benefit customers and employees (Hansen, Nohria, & Tierney, 1999). KM initiatives face almost certain extinction (in a relatively short period of time) if they are not backed by top-level executives. Managerial support can be instrumental in encouraging individuals to share personal knowledge, thus, fostering an environment where communities of interest/practice flourish (Davenport & Prusak, 1998). Knowledge creation and diffusion within the organization is also heavily influenced by the attitudes and beliefs of organizational leaders (Davenport & Prusak, 1998). An organization whose middle and upper level managers support KM initiatives is much more prepared to succeed in establishing a well-grounded program.

Participation seeks to involve everyone in the change process to ensure that all inputs are considered during the implementation of KM initiatives. Davenport and Prusak (1998) stress the importance of making knowledge management everybody's business when planning to undertake KM initiatives. A good example of this is when Chevron Corp. took a 'direct participation' approach toward fully engaging all of their employees in an attempt to garner the collective wisdom of employees (Ellis & Norman, 1999). Chevron ensured that all organizational members were involved throughout the duration of the change process and pursued changes quickly. This ingenious idea proved to be

very successful in galvanizing employees at all levels to become a larger part of the change process. More importantly, it avoided eliminating prospective individuals who, otherwise, would have spread resistance to the changes. Individuals who are engaged early on and frequently in the change process are more ready to accept changes when they occur.

Quality of information involves the nature of information being dispersed to organizational members during a KM initiative (Holt et al. 2007). It evaluates the degree to which organizational members believe information is useful and meaningful concerning the changes being undertaken. Grimaud (1994, p. 36) stated that, "Management must explain why the change is necessary, what it will accomplish, and what the consequences of not changing would be." "The key is to communicate" (Grimaud, 1994, p. 36). If the quality of information is accurate, complete and satisfies organizational members' need to remain informed this could increase the chances for KM success. "A company will adapt to change most readily if it has many means of two-way communication that reach all levels of the organization and that all employees use and understand" (Stewart, 1994, p. 109).

KM Attitudes Measures

KM attitude measures assess how closely related the facets of KM readiness are to particular attitudes toward KM (Holt et al. 2007). These measures provide a general idea about how strongly individuals may feel about KM initiatives. This study will specifically address two areas: pessismism and KM commitment (Holt et al. 2007).

Pessimism was observed in order to evaluate an individual's level of cynicism concerning KM initiatives (Holt et al. 2007). This represents an important point of concern as research has shown that cynicism is strongly correlated to resistance to change (Stanley, Meyer, & Topolnytsky, 2005). "Cynicism about organizational change can become a self-fulling prophecy if cynics refuse to support change" (Reichers, Wanous, & Austin, 1997, p. 48). Therefore, organizational leaders must always be cognizant of members who could undermine KM initiatives. Their actions could easily, "…bring about failure or limited success" (Reichers, Wanous, & Austin, 1997, p. 48), if they are allowed to recklessly circumvent KM processes and procedures. Organizational leaders should focus on providing rewards, increasing training, and building credibility so that members will become more trusting of upcoming changes (Reichers, Wanous, & Austin, 1997).

KM commitment pertains to organizational members' desire to support KM initiatives; their understanding of repercussions resulting from lack of support; and, a felt obligation for KM initiatives (Holt et al. 2007). Employees' perception of the organization's vision and their level of commitment can adversely affect how much resistance there will be toward KM goals (Matejka & Julian, 1993). This fundamental ideology is highly valued and is a very important factor when considering any KM change process. It requires dedication of orgazanizational resources and, even in some cases, generating 'creative chaos' that engenders synergy and harmony (Nonaka & Takeuchi, 1995; Davenport & Prusak, 1998). This increases employees' involvement in the change process and invigorates their commitment toward solutions that will benefit

the organization. Ultimately, a more fertile environment should exist for adopting KM initiatives.

Summary

This chapter has covered some of the fundamental views and ideas that define KM principles and intentions. Data and information are the building blocks to knowledge and require a good understanding of them if they are to be managed properly. Prior to undertaking any KM projects an organization should have a good sense of its likelihood for successfully completing it. Subsequently, it is important to examine KM readiness because it can accurately assess the organizational environment and assist leaders in developing an effective KM program. The methodology we used to measure and evaluate these factors are discussed in the chapter 3.

III. Methodology

Case Study Introduction

"A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (Yin, 2003, p. 13). A primary goal of this research study was to find the most effective research method that attempted to address our research questions through the use of an effective methodological strategy. In order to do this, our research study considered several factors that specifically focused on meeting this approach. Initially, we wanted to obtain data that were realistic and relatively unaltered from its natural environment to ensure specificity. Secondly, we hoped to acquire this data in as unobtrusive manner as possible to minimize participant resistance and gain leadership support. Therefore, we chose to adopt a case study stratagem as the best possibility for satisfying these requirements, despite recognizing certain drawbacks to this approach.

KM readiness requires a certain level of understanding about the individuals and culture in which the change is taking place (Holt et al. 2007). This meant that our desire to effectively measure readiness had to take place in an environment which was largely unaltered from its normal state. This made the case study more suitable for our research study because it considered, "contemporary event[s] without manipulating relevant behaviors" (Yin, 2003, p. 7). In an effort to maximize realism of results, our research study sought to assess the organization's readiness in the setting and environment in

which normal activities and events took place. We were then able to specifically correlate the study's findings with that particular organization.

The practicality and relevance of KM can be assessed and viewed through the attitudes and behaviors of organizational members (Holt et al. 2007). This belief is particularly important in our adoption of a case study approach because it coincided with using direct observations and interviews for obtaining data. Being able to monitor and observe the organization's setting and daily occurrences—without direct intervention— allowed us the ability to gain first-hand knowledge about the members' typical behaviors, work habits and attitudes. They could also be obtained by sampling specific individuals who could provide more in-depth knowledge about the organization's culture and climate. This triangulation of evidence gathering could be completed while minimizing obtrusiveness and data manipulation which added to the existential realism of the data (McGrath, 1981; Yin, 2003).

Notwithstanding the benefits of using of a case study strategy in this research, we acknowledged certain weaknesses that were inherent in its design. These flaws emphasized our recognition that the case study approach did not sufficiently cover all areas of research desiderata nor did it imply the singular best approach in all research studies (McGrath, 1981). Some limitations we faced in using the case study approach were its lack of rigidity and the difficulty of results to be generalized to a broader audience.

Exploratory

The goal of an exploratory case study is to develop pertinent questions that require further inquiry for resolution (Yin, 2003). This research study uses two different approaches to address the purpose and reason behind the research. Firstly, it attempts to assess AFWA's readiness for adopting KM initiatives by examining various organizational elements which are critical to KM success. Secondly, it further proposes research criteria that will be used in measuring success or failure of AFWA in embracing KM.

Selection

Air Force Weather Agency (AFWA)

AFWA is a field operating agency comprised of approximately 250 personnel located in Omaha, Nebraska. It was reorganized from Air Weather Service to its current designation in 1997. The organization is responsible for the management and oversight of all Air Force weather operations and personnel through the use of air and space based systems. They are responsible for the development, procurement, testing, programming, and installation of fielded equipment used throughout the world (USAF, 2007).

AFWA's workforce is primarily comprised of senior military leaders and civilian contracting personnel who have a significant amount of experience within the weather career field. Most military workers are stationed here after spending the majority of their career in very technical positions. Their backgrounds are based in meteorology with many having a strong knowledge of computer related skills. This is similar with the large number of contracting personnel who make up AFWA's workforce. Many are retired

military personnel who have acquired jobs with outside agencies and are assigned to work there. Others have a long history of affiliation with the military through federal employment and are well versed in how military organizations operate.

The organization's daily operations specialize in non-routine tasks which require an in-depth knowledge of meteorological systems that are designed to meet end-user requirements. AFWA needs are met through a collaborative process in which project managers are responsible for overseeing the initiation and completion of contractual demands. This cradle-to-grave approach requires a team of personnel who are skilled in a number of different areas. The organization is knowledge intensive and heavily relies upon its members' cognitive skills and ability to solve complex problems. There is a high turn-over rate of personnel due to changes in military assignments and project life cycle changes. As projects continually start and end changes in personnel often accompany them. As a result, AFWA is reliant upon knowledge sharing practices to ensure smooth continuity of operations.

Why AFWA?

We selected AFWA as a good candidate to use in this research study based upon three important factors that we considered:

- The Air Force is embracing the use of KM as an enterprise-level strategy

- AFWA heavily relies upon knowledge while performing organizational activities within its knowledge-orientated culture

- AFWA's technological and organizational infrastructure is likely to support KM initiatives

Each of these factors can indicate an organization's propensity to successfully support

and implement KM initiatives (Holt et al. 2007; Davenport & Prusak, 1998). They are

especially good measurements for assessing the organization's KM readiness and ability

to embrace KM altogether (Holt et al. 2007).

Creating an instrument

The finalized instrument which Holt et al (2007) developed was a 115 question

survey which asked respondents about their views concerning KM. It also asked

respondents to provide some personal background information which would be used for a

demographic statistical analysis. Holt et al's (2007) survey questions aimed at capturing

individual responses so that they could later be quantified and cross-compared between

the different constructs within the overall model. The five constructs Holt et al (2007)

used in their readiness model were:

- Individual attributes measures

- Context measures

- Content measures

- Process measures

- KM attitudes measures

"Evidence for case studies may come from six sources…" (Yin, 2003, p. 83).

They are: documentation, archival records, interviews, direct observations, participant

observations and physical artifacts (Yin, 2003). Of the six techniques we chose to use

interviews coupled with directly observing organizational activities to gather context rich

data for case study research. This is consistent with other researchers who believe fewer

questions are needed when conducting interviews, thus, reducing the need for a large

sampling instrument (Leedy & Ormond, 2005). Additionally, open-ended interview

questions allow us to gather context rich and specific data. Our finalized instrument (see

Appendix A) consisted of a total of twenty questions and was divided up as such:

- Demographics – 3

- KM attitudes – 4

- Individual attributes – 3

- Context – 2

- Content – 4

- Process – 3

- Final question – 1

We believe that this instrument would provide sufficient representation of each

construct within the model, allow us to gauge AFWA's readiness for KM and determine

if there were other factors present that might affect their success. Each question as vetted

by a member of AFIT's faculty with knowledge and experience in the field of KM to

ensure accurate and targeted data collection. After evaluating the instrument we were

confident that it met our intended research goals. Further, we used Yin's (2003)

methodological approach as a guide for conducting our case study research.

Propositions

The following propositions have been extended from Holt et al's (2007) summary

of relevant constructs which are antecedents to KM readiness. These constructs also

remain the principle framework used in our research study for assessing AFWA's KM

readiness. Our propositions reflect an important component of Yin's (2003) research design principles when conducting case study research.

Proposition 1: Individual attributes factors influence KM readiness

Successful KM initiatives are influenced by the members of an organization and those involved in the implementation and development of KM projects (Cho, Jerrell, & Landay, 2000). Individuals represent the 'who' aspect of those people which are an essential component of the KM readiness model (Holt et al. 2007). People's feelings are a major contributor toward their willingness or unwillingness to accept changes brought on by KM initiatives. Their behaviors can be associated with the type of support they provide for or against prospective changes (Herscovitch & Meyer, 2002).Thus, they can be positively correlated to an organization's KM propensity to be ready or unready for adopting KM initiatives.

Proposition 2: Contextual factors influence KM readiness

KM success is influenced by the environment in which (where) KM initiatives are occurring and play an important role in determining the outcome (O'Dell & Grayson, 1998). An organization that emphasizes the accessibility of knowledge through knowledge markets and mapping is more likely benefit from KM (Davenport, 1997). Consequentially, this same organization will be better prepared and suited for adopting KM initiatives and changes. Meshing the organization's KM initiatives with its culture is instrumental in the success and prosperity of organizational goals (Davenport & Prusak, 1998).

Proposition 3: Content factors influence KM readiness

KM success is influenced by the things (what) which are involved in the implementation and development of KM initiatives that require major changes in the organization (Havens & Knapp, 1999). An organizational member's knowledge about an impending change can become an imposing barrier to the change itself (Matejka & Julian, 1993). Thus, this same individual's perceived belief about the benefits or drawbacks of KM can lead to the success or failure of the project (Davenport & Prusak, 1998). Consequently, KM readiness hinges upon the content in which the KM initiatives are taking place (Holt et al. 2007).

Proposition 4: Process factors influence KM readiness

KM success is influenced by environmental elements which govern 'how' KM initiatives are nurtured and fostered (Gold, Malhotra, & Segars, 2001). Such factors like managerial support and employee participation are critical aspects in deciding if KM initiatives succeed or fail. (Davenport & Prusak, 1998). The contributive effects of organizational leaders and members do play a major role in KM's development and long-term impact. Therefore, process factors can be good indicators of an organization's readiness toward adopting KM initiatives.

Proposition 5: KM attitudes influence KM readiness

KM success is influenced by the general attitudes and commitment level that organizational members have toward changes brought about through KM initiatives (Holt et al. 2007). The affective, normative, and continual commitment of organizational members is key to amount of support KM-like projects will receive (Herscovitch & Meyer, 2002). A lack of loyalty and dedication from organizational members can spell

disaster for KM initiatives that fail to garner much needed support. However, an organization that values KM and possesses a knowledge-oriented culture is more aptly prepared for meeting KM goals (Davenport & Prusak, 1998).

Data Collection

As previously stated, we chose to utilize semi-structured interviews and direct observations to obtain the necessary samples for conducting our research. We felt these two methods of data collection met our previously stated goal of maximizing realism through unobtrusive methods. Each method distinctly contributed to the realism and usefulness of this research study.

Semi-structured Interviews

The focus of the interviews followed a systematic protocol which had two main purposes: to minimize predetermined responses by utilizing an open-ended question format and to use a straightforward approach to gather data (Patton, 2002; Meyers & Newman, 2006). This research protocol also allowed us to target specific areas of interest related to our case study topic (Yin, 2003).

The interviews were scheduled in two hour blocks with one hour for conducting the actual interview and another for compiling and synthesizing notes to ensure accuracy (Meyers & Newman, 2006). Eight interviews were held over a two day period in secluded and private offices in an effort to minimize distractions (Meyers & Newman, 2006). Respondents were informed about the nature of the research study and their anonymity concerning their specific responses. Each respondent consented to a recording of the interview for the sake of referencing during the course of the research study.

Respondents provided information concerning their views and feelings about KM in relation to the instrument questions.

Direct Observations

"Observational evidence is often useful in providing additional information about the topic being studied" (Yin, 2003, p. 93). As part of our field visit to AFWA we paid particular attention to the behaviors and activities of organizational members by directly observing daily routines. These observations helped to solidify and verify data which was collected through the interview process. We also noted the building's layout (break-areas, spaciousness, etc.) as this could play a huge part in contributing to the transfer of knowledge (Davenport & Prusak, 1998). Our observations provided some insight into the culture and climate of AFWA while alleviating the need for direct interaction with organizational members.

Participants

Participants were chosen based upon the need for a representative sample to conduct our research study. Individuals were not required to have any specialized training or skill-set concerning KM and only needed to be a full-time member of AFWA. After collaborating with AFWA leadership we focused our search on selecting members who would be in the best positions to implement, observe, and evaluate any new KM initiatives that AFWA might undertake. These individuals would best represent the chances and likelihood of KM success or failure within AFWA. A total of eight individuals were chosen (6 military, 2 civilians) who varied in grade and duty responsibilities. Their average work tenure at AFWA was 5.27 years.

Summary

We decided to use a case study approach since it would allow us to capitalize on some of the advantages that it would provide. These advantages included gaining context rich data from the respondents we interviewed. It also meant that we could intuitively monitor the feedback and replies that were given. Finally, the case study approach provided us the best possible methodology for conducting a scientific investigation to answer our research questions and propositions.

<center>**IV. Analysis and Results**</center>

Overview

Our analysis and discussion of the data follows the same approach taken during the interview process. First, we discuss the demographics of the respondents to help draw some conclusion concerning the organization's background and composition. We then discuss each proposition as it related to the research model presented in Chapter 2. Since each proposition centered on the relationship of individual constructs (individual attributes, etc.) to the dependent variable (KM readiness) we continued to present them in this fashion. We also address some of the direct observations that we encountered during our data collection period. Finally, we discuss the results and conclusions that were extracted from our analysis of the data.

Data Analysis

In order to effectively discuss the findings of our data collection we organized each set of questions according to the construct to which they pertain to and presented them in a table format. Each table is composed of six columns and represents the questions and responses obtained during the interview process. The first column, "Questions", lists the actual questions taken from our research instrument. They maintain the same numbering schema that they contained within the instrument. The second column, "Responses", contains a list of the replies we received during the interview process. However, the responses have been summarized to group similar replies into the same category. Each lettered item (a,b,c, etc.) represents a different overall theme concerning respondents' replies. The third column, "Quantity", indicates the number of

<center>38</center>

individuals who responded to the question similarly. The final three columns "P", "M", and "T", represent the corresponding number of professionals, managers and technicians that replied the same way to the respective question. However, we must note that since nearly all of our questions were open-ended and allowed respondents the latitude to expound on the answer the sum of each "Quantity" column may not always total to eight.

Demographics

Our first objective in the data analysis process was to categorize each respondent according to their job position within the organization. Since duty titles could compromise respondents' anonymity we chose to classify them in one of three different areas: professional, managerial, or technical. The following guidelines were used to consistently place each respondent into the proper category:

- Professional – those individuals whose livelihood, job descriptions, and responsibilities place them in a position where their authority and oversight is used to govern the activities and duties of others.

- Managerial – those individuals whose work activities and duties are responsible for overseeing the accomplishments of other workers.

- Technical – those individuals whose work activities are responsible for ensuring daily tasks and duties are successfully completed.

Of the eight respondents we interviewed at AFWA, four were professionals, two were managers, and two were technicians.

Next we queried respondents about what they do in context to their overall job responsibilities. These generic responses were used to help provide some clarification and

distinction when categorizing respondents. They also aided us in comprehending organizational activities and processes. This increased our familiarization of the organization's infrastructure and makeup.

Finally, we reviewed respondents' tenure at AFWA to better understand the level of work experience each individual had within the organization. As previously noted, the cumulative tenured average for all respondents was 5.68 years. A further decomposition of tenured years at AFWA indicated professionals averaged 6.71 years, managers averaged .67 years, and technicians averaged 8.5 years. However, we must note that most respondents did not always maintain their current position during their entire tenure with AFWA.

Analysis of Proposition 1: Individual attributes factors influence AFWA's readiness for KM

We asked respondents three questions pertaining to their feelings about KM and the necessary skills they believed were needed to successfully implement it. These questions helped us gauge how individuals felt concerning their own ability to fulfill KM roles and responsibilities. They also allowed us to determine how quickly organizational members were in adopting new ideas and practices. As depicted in Table 4.1, common themes were captured from respondents' replies and compiled categorically.

Pertaining to question #8 several individuals thought openness and the ability to talk to people were important skills needed to make KM work. Another respondent stated that you must be able to capture the knowledge experiences of others in order to leverage KM. Having a fresh perspective and lacking the fear of failure was also noted as

necessary skills for KM. However, the most respondents stated that the ability to interact and communicate with others was the most important skill needed for ensuring KM success.

Responses fell into one of three different categories: good communication, innovation, and none. 'Good communication' entailed all replies in which the respondents thought individuals should possess good human interaction skills and the ability to relate well with others. 'Innovation' encompassed replies in which respondents believed insight and the ability to harness knowledge to increase organizational objectives were important skills. 'None' meant that respondents could not think of any necessary skills that were essential to KM.

Regarding question #8, most individuals believed good communication skills were important to developing a successful KM program. Interestingly, it was primarily mid and low-level employees (Managers and Technicians) who thought communication was essential to KM while Professionals thought otherwise. This is somewhat contrary to Davenport and Prusak's (1998) belief that it is the responsibility of senior leaders to communicate the criticality of KM if the organization is to be successful. These same individuals also expressed a good understanding of why communicating is important to KM. Some elaborated on the need for openness and discouraged taking an ownership view of knowledge. Their comprehension of these fundamental principles of KM were very informed and supported by our research literature.

Two individuals (both Professionals) believed innovation was a good contributor to KM success. Their responses emphasized a need for individuals to have a fresh

perspective about finding solutions that were critical to KM implementation and development. They also expressed the importance of having a good understanding of how to leverage personal knowledge in order to increase organizational knowledge. Both of these philosophical beliefs were well referenced practices for generating new knowledge within an organization.

The final two individuals could not think of any required skills needed that were vital to the success of KM. This was, due in part, because of their limited understanding of KM and its implementation requirements. Given the immaturity of the KM discipline, this is not uncommon among many practitioners.

The second question (#9) aimed at providing our research study a sense of how receptive individuals were in adopting new things. There were three response categories: very quick, fairly quick, and not quick. 'Very quick' meant that individuals stated that they were very accepting and trusted new ideas. 'Fairly quick' included those individuals who believed that they were generally accepting and trusted new ideas. 'Not quick' centered on those individuals who were skeptical and untrusting of new concepts.

Responses to question "9" indicated that nearly all organizational members were open to accepting new ideas. This is likely due to the nature of work at AFWA in which organizational members are continuously exposed to new technologies and ideas that are essential to meeting its customers' demands. Overall attitudes were very positive and supportive toward KM initiatives and implementation requirements. For instance several respondents stated that they are readily accepting of new ideas. Another respondent said that they are, generally, open and receptive to innovation. However, some respondents

did express some apprehension in adopting new ideas without first, carefully, considering what the risks might be. One respondent stated that they were 'pragmatic' and neither quick nor slow toward accepting new ideas. Only one person expressed some reluctance toward embracing new ideas. This person said that they were 'skeptical' of new ideas.

The final question within this construct (#10) was designed to assess how well respondents felt concerning their own ability to perform KM roles and responsibilities. Responses fell in one of two categories: very confident and fairly confident. 'Very confident' included those respondents who believed that they were well prepared and had the necessary skills for sustaining knowledge sharing objectives. 'Fairly confident' was made up of respondents who felt reasonably assured that they possessed knowledge sharing skills.

One Professional stated that they were not comfortable with the 'business as usual' mindset and was confident in their ability to implement knowledge-sharing changes. Another respondent (also a Professional) stated that their responsibilities did not involve making policy, rather, it entailed the implementation of policies. They were also confident in their knowledge-sharing abilities. Other respondents simply stated that they were very confident in being able to make knowledge-sharing changes work.

Overall, respondents believed that they had obtained the necessary skills to, at a minimum, confidently support knowledge sharing within the organization. This could easily be attributed to the seniority, longevity, and maturity of respondents within a structured military environment. Having prior experience to middle and upper levels of management, in which transferring information is commonplace, may have contributed to

respondents' high confidence levels. Nonetheless, little disparity was noted among

respondents as Professionals and Managers were equally distributed while Technicians

were skewed toward being very confident.

Table 4.1 – Summary of responses concerning individual attributes toward KM readiness

Question	Responses	Total	P	M	T
8. What skills do you feel are needed to make knowledge management work?	a. Good communication	4	1	2	1
	b. Innovation	2	2	0	0
	c. None	2	1	0	1
9. How quick are you in trusting new ideas before fully accepting them?	a. Very quick	2	1	0	1
	b. Fairly quick	5	3	1	1
	c. Not quick	1	0	1	0
10. How confident are you that you have the skills needed to make knowledge sharing changes work?	a. Very confident	5	2	1	2
	b. Fairly confident	3	2	1	0

Analysis of Proposition 2: Contextual factors influence AFWA's readiness for KM

In this construct we posed two questions that would help us gauge how

comfortable respondents felt about the amount of support they believed was being

provided to organizational members from top leaders. Their responses gave us a better

understanding of each individual's perception concerning the organization's commitment

to KM. Table 4.2 below provides a summary of the interviewees' responses that were

compiled during our visit.

Question #11 was aimed at helping us determine how well respondents felt about

the communicative environment within AFWA. Is pertinent information passed along?

Are individuals aware of what others are doing? These were some of the questions we

hoped to have answered by queuing respondents. Their answers fell into one of two

categories: fairly satisfied and not satisfied. 'Fairly satisfied' was composed of the

individuals who felt pleased with how information was passed along within AFWA. 'Not satisfied' individuals included those persons who were not pleased with the way information was being passed along.

Respondents' comments were somewhat reserved concerning AFWA's communication environment. One individual stated that lots of things happen but they are lost on sharepoint. Another person stated that you must be proactive when trying to find out what is happen within AFWA. On top of this, some believed that the recent changes within the organization were not handled well which contributed to some confusion during execution.

However, most individuals were reasonably satisfied with how well information was being communicated within AFWA. Professionals topped the list of those who were most satisfied while Managers and Technicians were evenly split. It is noteworthy to point out that none of our respondents were overly satisfied with the communication process. Whether satisfied or not, almost all respondents expressed a need for improvement in the dissemination of information. Two important examples that individuals pointed out which shaped their view of AFWA's communication were:

- A lack of information during a recent major change in operations
- Difficulty in finding information on the organization's sharepoint drive.

A recent restructuring of AFWA's hierarchy brought about some positional changes, realigning of subordinate units, and transference of duties and responsibilities. This included a physical move from one location to another that required extensive planning and organizing. Some of the respondents expressed discontent about 'how' and

'why' certain changes were being made. Although, most understood the need for change they felt little information was being provided to help them navigate through all of the changes being made.

AFWA instituted a 'sharepoint' drive which allowed organizational members accessibility to shared information. Information can be pushed or pulled and served as a central point of contact for remaining abreast of current news and events. Overall our respondents found the sharepoint drive to be helpful; however, they thought it lacked organization. As a result, they felt it was often too difficult to obtain the information that they were trying to find. This discouraged them from using the sharepoint and caused them to result to alternate methods of staying informed.

The other question within this construct (#12) sought to examine our respondents' perceptions concerning how well organizational leaders assisted them in reaching their potential. All replies were categorized as either: very supportive or fairly supportive. Responses were classified as 'Very supportive' if individuals felt leaders did a very good job of extending help to organizational members when needed. 'Fairly supportive' meant that leaders did a satisfactory job of extending help to organizational members when needed.

All respondents believed AFWA leadership was (at a minimum) supportive of them in their daily job activities. For example, one respondent stated that the leader of their section drove the vision of the organization which helped them do their job better. Although most respondents were generally satisfied, all believed that leaders would provide genuine assistance if requested. Respondents also felt that leaders empowered

them enough to succeed with little or no intervention required. Furthermore, respondents believed leaders trusted them as subject matter experts and, therefore, relied heavily upon their professional judgment. This helped instill confidence and autonomy among workers which allowed individuals the flexibility to accomplish assigned tasks.

Table 4.2 – Summary of responses concerning contextual factors toward KM readiness

Question	Responses	Total	P	M	T
11. How satisfied are you with the information you receive about what's going on within AFWA?	a. Fairly satisfied	5	3	1	1
	b. Not satisfied	3	1	1	1
12. How much do you believe the organization extends itself in helping you perform your job to the best of your ability?	a. Very supportive	3	1	1	1
	b. Fairly supportive	5	3	1	1

Analysis of Proposition 3: Content factors influence KM readiness

Four questions were presented to each respondent targeting the relevancy of 'change' that is often associated with KM initiatives. Their responses helped us understand what has taken place within AFWA and the effects it has had on organizational members. Table 4.3 below provides a summary of respondents' views pertaining to these questions.

Question #13 focused on eliciting respondents' thoughts about what they believed was necessary for sharing knowledge within AFWA. We compiled their answers into three main categories: ability to communicate, place to interact, and top-level support. 'Ability to communicate' meant that individuals believed communication inside and outside of the organization was essential to knowledge sharing. 'Place to interact' described individuals' belief that the organization should have accessible places (both

virtual and physical) for organizational members to meet and collaborate. Respondents' answers fell into the 'Top-level support' category if they believed leadership involvement was essential to knowledge sharing practices.

Both individuals who thought communicative skills were essential to knowledge sharing were Professionals. They stated that it is important to get as much face-to-face time with employees as possible in order to build good working relationships that foster information sharing. One respondent, in particular, stated that some knowledge hoarding has created 'islands of excellence' which detracted from the organization's ability to implement KM objectives. This point corresponded with Davenport and Prusak's (1998) assessment that knowledge had powers that would dissolve if shared with others. It also confirmed their belief that leaders would have to contend with these type issues if they wish to succeed in their KM initiatives.

The majority of individuals responding to our question thought that having a place to interact with fellow co-workers was instrumental in their ability to share knowledge. They stated that there were benefits in being able to leverage technological advancements which aided them in daily activities such as: email, sharepoint, and video teleconferencing, etc. One respondent stated that the new building (which they had relocated into) improved information sharing. The new structure allowed easier access among units and took advantage of increased office space for collaboration and work projects. These changes also increased AFWA's ability to leverage training opportunities via the internet and coordinate scheduling needs.

Lastly, only one individual said that support from top leaders was important to knowledge sharing. This person thought leaders made it easier to share knowledge by understanding their roles as subject matter experts. By showing trust and confidence in workers, leaders were contributing to organizational members' desire to communicate their expertise with others. It also made it easier to offer suggestions concerning other projects within AFWA.

Our next question (#14) sought to capture respondents' feelings about long-term changes meant to improve knowledge sharing. Replies fell into one of three categories: very encouraged, fairly encouraged, and not encouraged. 'Very encouraged' indicates that individuals would feel very pleased if AFWA adopted knowledge sharing changes. 'Fairly encouraged' denotes that individuals would feel somewhat pleased if AFWA adopted knowledge sharing changes. Lastly, 'Not encouraged' meant that individuals would not be pleased if AFWA adopted knowledge sharing changes.

Nearly all respondents felt minimally encouraged about the possibility of AFWA employing more knowledge sharing practices. One respondent stated that they had a 'wait and see' attitude concerning these changes. Of those who responded positively some were more encouraged than others, however, they all viewed these changes as a step in the right direction. One Manager stated that it was such a good idea for the organization because it would allow sections which felt as though they were on the outside to feel more welcomed. Another individual (a Professional) stated that most informal methods for sharing knowledge were already in place while leaders just needed to focus on more formal techniques such as utilizing break-room televisions to

disseminate information. The one person whose dissent was not encouraging about these changes provided no definitive reason for their skepticism.

In question #15 we attempted to find out how respondents thought changes brought about due to KM would affect them personally. We hoped to determine if respondents believed that they were either more or less a part of the organization. Each response was categorized as either it: would increase team spirit a lot, would increase team spirit some or would not increase team spirit. 'Would increase team spirit a lot' meant that individuals' sense of belonging in the organization would increase drastically if knowledge sharing changes were adopted. 'Would increase team spirit some' encompassed those individuals' whose sense of belonging in the organization would increase somewhat if knowledge sharing changes were adopted. Finally, 'Would not increase team spirit' designated individuals whose sense of belonging in the organization would not increase or would decrease if knowledge sharing changes were adopted.

Overall most respondents did not think KM initiatives would affect esprit de corps significantly within AFWA. This was due, in part, because they already felt strongly bonded within the organization and had high regard for unit cohesion. These individuals stated that they already had very good relationships with co-workers and regardless of any KM initiatives it would be hard to improve upon them. Although, ready to embrace KM changes respondents could not foresee any noticeable affects that knowledge sharing might have as related to 'team' spirit.

Of the final two individuals one abstained from answering the question while the other thought otherwise. No reason was given for the lone abstention, however, the final

respondent stated that knowledge sharing changes would allow organizational members to feel more valued and as if they were bigger contributors. This person also stated that implementing knowledge sharing practices would reduce the number of wild goose chases that currently distract organizational members, thus, devaluing perceived contributions.

Question #16 aimed at helping us gauge respondent's perception about the importance of the information they received from leaders concerning changes made within the organization. We wanted to determine if leaders provided information that was helpful or not in assisting organizational members with adapting to change. Respondents' had one of two answers related to this question, which was either: information is very helpful or information is fairly helpful. 'Information is very helpful' meant that leaders provided very good information that helped organizational members understand the need for change. 'Information is fairly helpful' indicated that leaders provided adequate information that helped organizational members understand the need for change.

For the most part all respondents believed leaders provided relevant information which helped them understand the need for change. However, there were some areas that respondents thought leaders should consider to help improve the adoption of change. In order to simplify our discussion we listed each of their recommendations below:

- Leaders needed to articulate better the plan about how the end-state would be reached; vague processes lacked waypoints for guiding individuals through the change process

- Leaders needed to ensure better flow of information down to lower level

  workers

- Leaders needed to be less hesitant about employing marketing techniques

  that would help organizational members embrace upcoming changes

Respondents also seemed to comprehend the criticality of information in regard to the change process. Several individuals explained how having a good explanation about the upcoming change prepared them for the need to change. They also said that having little or no information actually made it harder for them to want to change. If ignored by AFWA leaders, this could discourage organizational members from fully participating in future changes and endanger the chance of success from any KM initiative.

Table 4.3 – Summary of responses concerning content factors toward KM readiness

Question	Responses	Total	P	M	T
13. Describe some of the things which make it easy for you to share knowledge within the organization?	a. Ability to communicate	2	2	0	0
	b. Place to interact	5	2	1	2
	c. Top-level support	1	0	1	0
14. In the long run, how will you feel if AFWA adopt changes that will improve knowledge sharing?	a. Very encouraged	2	0	0	2
	b. Fairly encouraged	5	4	1	0
	c. Not encouraged	1	0	1	0
15. How much do you think knowledge-sharing changes will make it easier for you to feel like you're part of the 'team'?	a. Would increase 'team' spirit a lot	1	0	0	1
	b. Would increase 'team' spirit some	4	2	1	1
	c. Would not increase 'team' spirit	2	1	1	0
16. How much do you believe the information that you receive about upcoming changes helps you in understanding the change?	a. Information is very helpful	3	1	0	2
	b. Information is fairly helpful	5	3	2	0

Analysis of Proposition 4: Process factors influence AFWA's readiness for KM

In this construct we asked respondents three questions pertaining to how much impact organizational members had in relation to the changes that were made within AFWA. The responses we received allowed us to assess whether or not AFWA could sustain and expand KM initiatives on an ongoing basis. Table 4.4 below summarizes the responses we obtained during our interviews with organizational members.

We posed question #17 to the respondents to determine how much they believed organizational leaders emphasized the adoption of knowledge sharing initiatives. We compiled all responses into one of three categories: leaders push embracing change a lot, leaders push embracing change sometimes, and leaders do not push embracing change. 'Leaders push embracing change a lot' meant that individuals were highly encouraged to accept changes that would improve knowledge sharing. 'Leaders push embracing change sometimes' implied that individuals were not always encouraged to accept changes that would improve knowledge sharing. 'Leaders do not push embracing change' indicated that individuals were hardly ever encouraged to accept changes that would improve knowledge sharing.

Once again, nearly all respondents believed that leaders were receptive to changes that would improve knowledge sharing and expected organizational members to do so as well. Respondents had high praise for AFWA leaders concerning their recognition of organizational members who were change agents that could further knowledge sharing goals. More specifically, they thought leaders understood the importance of getting everyone involved in communicating before making drastic changes. One Professional

stated that it was their primary objective to share information with organizational members to increase their propensity to exchange knowledge also.

Only one respondent did not believe that leaders pushed the need for embracing change within the organization. This person said that change was not high on leaders' agenda because they were heavily engaged in so many different things. However, the respondent did acknowledge that some improvements had been made concerning leaders' recognition for more substantive support for knowledge sharing initiatives. Finally, the respondent noted that this was a marked shift from previous paradigms held by AFWA leaders in the past.

It is important to note that respondents were asked to answer questions #18 and 19 within the context of their immediate work sections. In keeping with military order and discipline it is unreasonable to think personnel would always influence changes that were outside their span of control. After taking this fact into consideration we posed both questions #18 and #19 to assess respondents' perceptions concerning their involvement in changes which directly affected the work environment.

In questions #18 we specifically sought to determine how influential respondents thought they were concerning change initiatives. Responses to question #18 were synthesized into one of two categories: a lot of input or some input. 'A lot of input' meant that individuals felt they had a lot of influence concerning upcoming changes within their area of work. 'Some input' indicated that individuals felt they had some influence concerning upcoming changes within their area of work. Overall respondents expressed positive experiences about how they had been allowed to offer input into expectant

changes. All were relatively satisfied with how organizational leaders had shown confidence in their technical abilities and expertise. One respondent stated that AFWA leaders were receptive to new ideas and gave high regards to their input. This was consistent with other respondents' views that we came across during our interview process.

We asked question #19 to assist our research study in determining how extensive respondents' thought they were in bringing about change within AFWA. All replies were categorized as respondents either had: a lot of control, some control or no control. 'A lot of control' meant that individuals felt they had a lot of decision-making authority over proposed changes. 'Some control' showed that individuals felt they had some decision-making authority over proposed changes. 'No control' indicated that individuals felt they had no decision-making authority over proposed changes.

Nearly all respondents believed they had at least some control over changes that took place within their respective sections. If changes were made that respondents did not agree with, they continued to support the final decision. Most respondents were satisfied with the level of decision-making they possessed and believed that the appropriate individuals were handling changes being made. The lone respondent who believed that they had no control over changes taking place within AFWA thought so primarily because of the nature of their work within AFWA.

Table 4.4 – Summary of responses concerning process factors toward KM readiness

Question	Responses	Total	P	M	T
17. How much do senior leaders encourage all of you to embrace changes that will improve knowledge sharing?	a. Leaders push embracing change a lot	2	1	0	1
	b. Leaders push embracing change sometimes	5	3	2	0
	c. Leaders do not push embracing change	1	0	0	1
18. How much input do you have into the decisions being made about upcoming changes?	a. A lot of input	5	2	1	2
	b. Some input	3	2	1	0
19. How much control do you have over proposed changes?	a. A lot of control	3	1	1	1
	b. Some control	4	3	1	0
	c. No control	1	0	0	1

Analysis of Proposition 5: KM attitudes influence AFWA's readiness for KM

The guiding purpose behind the questions we asked respondents within this construct was to obtain a sense of how organizational members viewed KM. For individuals who were not acutely familiar with KM or had never heard of it we provided some background information which allowed them to answer the remaining questions with some degree of familiarity. All respondents were minimally accustomed to informal KM practices from previous work experiences but had known it by different names. Table 4.5 contains a summary of respondents' answers that we received during our interviews.

Our first, question #4, provided us some insight into how well respondents were acquainted with KM principles and practices. Their responses fell into one of two categories: management of information or did not know. 'Management of information' meant that individuals believed KM largely entailed managing the organization's information. 'Did not know' implied that individuals did not know what KM was or had never heard of it. During our interview process we provided a brief explanation about KM and its historical origins to accommodate these individuals. By expounding upon KM's background we attempted to link these individuals' previous work experiences with traditional KM practices. This increased familiarization would allow them to answer the rest of the interview questions with some degree of intelligence.

The five respondents who characterized KM as managing information fully understood the intrinsic value of harvesting personal knowledge to ameliorate organizational knowledge. One person stated that KM was a process which tried to instill a discipline for keeping everyone on the same page. Another person stated that KM was about managing the knowledge of the enterprise. Of these respondents we noted three underlying themes which they provided that explicitly highlighted the importance of KM. They were:

- KM is meant to keep everyone on the same page through knowledge sharing

- KM is used to help leaders make better decisions and provide competitive advantage

- KM is essential in aiding the war-fighter (customer).

These sentiments echoed the findings from our literature review concerning

enhancements KM offered to organizational processes and strategies.

Question #5 was aimed at helping our research assess how organizational

members felt about KM prospects. Respondents' feedback was compiled as either:

excellent potential, useful to the organization or reserved about its benefits. 'Excellent

potential' signaled to us that individuals felt KM was an excellent prospect for the

organization. 'Useful to the organization' implied that individuals felt KM would be a

useful prospect for the organization. 'Reserved about its benefits' meant that individuals

felt KM offered little, if any, benefit to the organization.

Overwhelmingly, respondents believed KM was useful and applicable to business

processes, continuity of operations, and information sharing. They saw KM as a relevant

enabler of organizational goals, however, did not believe it was applicable to every

environment. Several respondents stated that KM was an evolving discipline and did not

realistically believe that it could solve all organizational problems. However, respondents

believed the potential advantages that KM offered were worth the time and effort it takes

to develop and implement them. Even the lone individual who was reserved about KM

saw potential in its usage. This person stated that KM would be good for an organization

faced with an aging workforce such as AFWA's.

Question #6 provided our research study some insight into the respondents' views

about the applicability of KM to AFWA in particular. This question had two intentions

which attempted to first get a definitive reply concerning whether or not respondents'

thought KM would be good for AFWA, and secondly, to determine the reasons behind

their answers. Respondents answered either 'yes' or 'maybe' to our question. 'Yes' meant that individuals felt KM would definitely aid the organization. 'Maybe' implied that individuals felt KM would probably aid the organization. We expounded on their reasons why below.

Since all respondents (at a minimum) believed that KM could possibly assist AFWA in achieving its goals we thought it useful to list the reasons why they felt this way. Respondents stated KM would be beneficial because:

- Organizational members moved around a lot within AFWA, thus, disrupting continuity

- Currently, some of AFWA's processes and tools needed to be improved

- Large turn-over and loss of personnel were handled poorly by the military

- There were a lot of disparities between systems currently in use

- Training programs could be more efficiently utilized to improve effectiveness

- There was a huge loss of experience when individuals left AFWA.

Respondents also noted some drawbacks that could hinder KM effects within AFWA. These noteworthy additions corroborated our research literature which realistically described some of KM's limitations. Respondents stated:

- KM should be carefully implemented and accessibility controlled

- Documentation could be time consuming and prove discouraging

- KM success was dependent upon what was implied or encompassed within it.

The final question within this construct (#7) sought to assess respondents' dedication to KM initiatives. Just as question #6 we posed this question with two

intentions in mind. Firstly, we sought to determine whether or not respondents' believed knowledge sharing changes would benefit AFWA. Our second intent was aimed at finding out why respondents felt the way that they did. Once again, respondents answered either 'yes' or 'maybe' to the first part of our question. 'Yes' meant that individuals believed changes in knowledge sharing would definitely benefit AFWA. 'No' implied that individuals believed changes in knowledge sharing would probably benefit the organization.

All respondents provided positive feedback concerning knowledge sharing possibilities within AFWA. Only one individual was somewhat restrained in their enthusiasm about knowledge sharing's potential. The following is a list of areas in which respondents stated knowledge sharing would offer the best opportunities for success within AFWA:

- Improving communication between organizational members

- Standardization of training

- Improving collaboration using sharepoint and email.

Some replies by respondents also pointed out several areas of precautions which should be understood before haphazardly implementing knowledge sharing initiatives. They stated that:

- Knowledge sharing strategies could be hard to manage

- Knowledge sharing strategies could be hard to implement

- Knowledge sharing strategies could overwhelm organizational members already burdened by previous changes.

Table 4.5 – Summary of responses concerning KM attitudes toward KM readiness

Question	Responses	Total	P	M	T
4. In your opinion, what is knowledge management?	a. Management of information	5	3	1	1
	b. Did not know	3	1	1	1
5. How do you feel about knowledge management?	a. Excellent potential	2	0	1	1
	b. Useful to the organization	5	3	1	1
	c. Reserved about its benefits	1	1	0	0
6. Do you think knowledge management will help AFWA? Why or why not?	a. Yes	7	3	2	2
	b. Maybe	1	1	0	0
7. Do you believe knowledge-sharing changes are a good strategy for this organization? Why or why not?	a. Yes	7	4	1	2
	b. Maybe	1	0	1	0

Question #20 sought to elicit any additional comments that respondents may have

had concerning KM. It was the final question that we asked respondents before closing

the interview process. Not surprisingly, no new information was provided which

respondents thought needed consideration. However, some individuals did reemphasize

main points that were previously covered, such as: the need for more knowledge sharing

and carefully managing change. Since these topics were already covered in our analysis

we did not provide another table for them.

Analysis of Direct Observations

While conducting our research study at AFWA we were careful to observe the

cultural and physical environment in which AFWA members operated. We noticed some

key points that we thought were relevant to AFWA's KM readiness. This included noting

the building's layout and functionality in which organizational members worked. We also

paid particular attention to how well organizational members seemed to interact with

each other. These observances helped in the analysis of AFWA's propensity to successfully implement KM initiatives.

As noted earlier, AFWA recently moved all of its operations into a newly constructed building that was specifically designed for its use. The building contained several important features that we thought would be conducive to KM development. Firstly, the building contained two separate break-areas on each floor that were easily accessible and allowed organizational members a place to interact in away from their desks. Secondly, formal meeting areas were available for organizational members to conduct group discussions. Thirdly, individual office areas were spacious and very open allowing organizational members the ability to easily communicate. These strides toward creating a better work environment advocated Desouza's (2003) emphasis that, "Just talking the talk is not enough when it comes to building support for organizational change" (p. 28).

Our observation of AFWA members engaging with each other provided our research some insight into their social and network environment. We thought it was very important to note how well organizational members interacted on a daily basis. For ease of discussion we have listed these observations as follows:

- Organizational members were frequently seen communicating and collaborating in open areas such as hallways, break-areas and office spaces
- Organizational members were able to provide information about where relevant personnel, offices, and information was located when asked

- Organizational members held two pot-lucks to strengthen team unity and share personal experiences.

Results

After analyzing of our research data we were able to draw some conclusions concerning the propositions we presented earlier. As each proposition was related to a particular construct within our model we addressed each of these findings individually. Therefore, we caution readers to beware that our conclusions specifically pertain to the individual construct in which we refer to them as they relate to KM readiness. More simply stated each independent variable has been measured against the dependent variable.

Our first proposition sought to determine if individual attributes factors influenced KM readiness. After reviewing respondents' answers and comparing this data with well established research literature we concluded that individual attributes factors did influence KM readiness. The more organizational members believed they possessed the necessary skills to fill KM roles and felt assured in their own abilities, the likelihood of KM success increased. Individual attributes factors were positively correlated with KM readiness.

The next proposition aimed at finding out if contextual factors influenced KM readiness. We assessed respondents' answers and found that organizational support and good communication were very important within AFWA. These factors were also found to be strong indicators of KM readiness in our research study. Thus, we concluded that contextual factors did influence KM readiness. In our research we found that contextual

factors fertilize the organizational environment which allows the development of KM initiatives. Contextual factors were positively correlated with KM readiness.

The third proposition was meant to assess whether or not content factors influenced KM readiness. Based upon respondents' answers we concluded that content factors did influence KM readiness. We found that the effects of large change were extremely relevant to organizational members and swayed their willingness to adopt future changes. This too corresponded well with the findings in our literature review that we conducted earlier. Content factors were positively correlated with KM readiness.

The fourth proposition attempted to determine if process factors influenced KM readiness. Once again, we reviewed respondents' answers and concluded that process factors did influence KM readiness. Process factors are the nutrients that help KM initiatives grow and become widespread practices within the organization. If organizational members were not treated as viable players in the development of KM initiatives then it was probably going to be short-lived. Process factors were positively correlated with KM readiness.

Finally, our fifth proposition sought to find out if KM attitudes influenced KM readiness. As with the other propositions we reviewed respondents' answers and concluded that KM attitudes did influence KM readiness. Since organizational members' perception of KM impacted their commitment to it we determined that there was a strong link between individuals' attitudes and KM effectiveness. Our literature review further corroborated this belief and asserted the importance of strong commitment from

organizational members. KM attitudes factors were positively correlated with KM

readiness.

V. Discussion

This research used a case study method for capturing data input to assess AFWA's KM readiness. Our model was composed of five constructs which evaluated KM factors thought to be indicators of an organization's KM readiness (Holt et al. 2007). This methodological approach enabled us to target specific areas of organizational behavior and attitudes. This method further allowed us the ability to maintain the validity and realism of our data.

Overall, our instrument provided very similar results as those contained in Holt et al's (2007) study. An analysis of respondents' feedback coincided with the original study's findings and supported many of the same assertions. We noted the same corollary relationships between individual constructs and KM readiness that were evident in Holt et al's (2007) research.

Research questions

In the first chapter we posed three questions which we believed would be examined and, more importantly, answered after a thorough evaluation of AFWA's internal environment. These questions had two primary objectives in aiding our research study. Firstly, we aimed to depict AFWA's propensity to develop and implement KM initiatives through the use of the readiness instrument. Secondly, we strove to assess respondents within AFWA's natural work environment to maximize the realism of our data.

The first question centered on the crux of this study and was intent upon determing whether or not AFWA was ready for KM initiatives. After evaluating

AFWA's KM readiness we hoped to provide a realistic assessment of how well the organization was prepared for embracing KM. We asked the following question:

1. Is AFWA ready for KM?

Our analysis of the data we obtained from respondents indicated that AFWA's propensity to develop and implement KM initiatives was overwhelmingly positive. In each of the five constructs that we looked at, the majority of respondents were well informed and held favorable views about KM. AFWA members' extensive job expertise and desire to improve organizational capabilities were fundamental requirements that were conducive to building a strong KM program. The next step for AFWA would be to formalize a KM section that is responsible for overseeing the capturing, codification, and dissemination of knowledge. Although this would only be a small step toward the institutionalization of KM within AFWA, it will arguably be the most critical step in the process.

The final question attempted to assess the completeness and totality of the our readiness instrument. We hoped to determine whether or not any new information would be captured from our study that was not evident in Holt, et al's (2007) study. We asked the following question:

2. What other factors may contribute to an oranization's KM readiness?

Although our research allowed respondents room to expound upon the questions we asked, we did not discover any new information outside of that which was already discussed in Holt, et al's (2007) original study. Although, respondents usually emphasized the same concerns as those found in the original sample we were able to

capture situation specific knowledge that would, otherwise, have been missed. No other contributing factors which increased the organization's KM readiness were provided by respondents.

Limitations

During this study we encountered several limitations that may have decreased the effectiveness of our research. These limitations restricted our research's generalizability to other organizations. Other limitations of case study research, such as causation, and potential interaction between factors, may have decreased our understanding of AFWA's actual KM readiness.

These limitations were commonplace in research studies of this nature and were equally noted in Yin's (2003) discussion of case study methods. Due to the context specific nature of case study research, our findings may not be generalizable to other organizations. This meant that our study would not necessarily produce consistent results even if the same methodology was followed. However, Yin (2003) did concede that some analytic generalizations could still be inferred when conducting a case study from a single organization. These generalizations would be primarily theoretically based and have less credibility than more preferred empirical research methods.

Future Research

The culmination of our research points to several areas that could possibly further the understanding of KM readiness. Firstly, a subsequent longitudinal study could be done with AFWA to examine the effects of time on the issues similar to a maturity

model. Secondly, a multiple case study could be done to compare results obtained using our readiness instrument.

A longitudinal study which extends the research done in our study could increase the understanding of the particulars context. Because our study tested an instrument that was still in its infancy we believe that a follow-up investigation may discover new areas of interest. An evaluation and greater comprehension of these new areas could hone the instrument's ability to assess organizational readiness. It could also provide a more precise indication of the degree of readiness an organization has by comparing past and current conditions.

A multiple examination of organizations using the readiness instrument could provide a corollary analysis of data sets. The more organizations that are assessed and evaluated using the readiness instrument the more we can expect to see greater improvements in the instrument's capability. A cross comparison of different organizations' data could refine the instrument's predictability and accuracy level when determining overall KM readiness. Although our study was confined to an individual organization, a well planned research project could adequately accommodate the study of two organizations done either simultaneously or consecutively.

Conclusion

AFWA is ready for KM! After examining the KM readiness instrument, we have concluded that an organization's propensity to adopt and institutionalize KM initiatives can be measured with some degree of confidence and reliability. Our study was based upon the most current research practices and literary principles that were available. We

found that the foundation of many KM initiatives was based upon a number of organizational factors which heavily influenced its success or failure. These factors often mean the difference between the exploitation of a competitive advantage or wasting millions in organizational resources. The polarity in the outcome was extremely dichotomous.

Our study was able to corroborate many of the same findings which Holt et al (2007) posed. However, there are possibly other factors in existence which can contribute to an organization's KM readiness. Unquestionably, these factors could place more uncertainty in our ability to accurately determine the organization's KM readiness. However, if properly investigated and well understood, they can further expand the theoretical and practical methods in which they are applied.

Appendix A

"The development of an instrument to measure readiness for knowledge management"

Interview Questions

Demographics:

1. Job category (Managerial, Professional, Technical):

2. What do you do in your job?

3. How long have you been at AFWA?

KM attitudes

4. In your opinion, what is knowledge management?

5. How do you feel about knowledge management?

6. Do you think knowledge management will help AFWA? Why or why not? (pessimism)

7. Do you believe knowledge-sharing changes are a good strategy for this organization? Why or why not? (commitment)

Individual attributes

8. What skills do you feel are needed to make knowledge management work? (efficacy)

9. How quick are you in trusting new ideas before fully accepting them? (innovativeness)

10. How confident are you that you have the skills needed to make knowledge sharing changes work? (efficacy)

Context (Organizational culture and climate)

11. How satisfied are you with the information you receive about what's going on within AFWA? (communication climate)

12. How much do you believe the organization extends itself in helping you perform your job to the best of your ability? (organization support)

Content (specific change)

13. Describe some of the things which make it easy for you to share knowledge within the organization? (appropriateness)

14. In the long run, how will you feel if AFWA adopt changes that will improve knowledge sharing? (appropriateness)

15. How much do you think knowledge-sharing changes will make it easier for you to feel like you're part of the 'team?' (personal valence)

16. How much do you believe the information that you receive about upcoming changes helps you in understanding the change? (quality of information)

Process

17. How much do senior leaders encourage all of you to embrace changes that will improve knowledge sharing? (management support)

18. How much input do you have into the decisions being made about upcoming changes? (participation)

19. How much control do you have over proposed changes? (participation)

Final question

20. Is there anything you'd care to add?

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14. ABSTRACT

The successful implementation of knowledge management (KM) initiatives require a level of commitment and preparedness by the organization that is commensurate with the expected results. An organization must be willing to allocate the necessary resources to ensure their readiness to undertake new KM projects. The purpose of this study is to review AFWA's organizational culture and measure its propensity for accepting KM initiatives. The study uses theoretical based constructs to evaluate and assess the organization's people, culture, climate, processes and attitudes as they relate to KM. This research was conducted using semi-structured interviews to elicit respondents' views about KM practices. The study points toward a strong corollary relationship between the organizational environment and its readiness to embrace KM principles.

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